

Title (en)

ARRANGEMENT AND METHOD FOR GUIDING A DRIVE ELEMENT ALONG A SUPPORT RAIL ON A VEHICLE DOOR STRUT

Title (de)

ANORDNUNG UND VERFAHREN ZUR FÜHRUNG EINES MITNEHMERS AUF EINEM TRÄGERBLECH EINES KRAFTFAHRZEUG-TÜRMODULS

Title (fr)

AGENCEMENT ET PROCEDE POUR GUIDER UN ELEMENT APTE A ENTRAINER UNE FENETRE LE LONG D'UNE ENTRETOISE DE PORTE DE VEHICULE

Publication

EP 0983417 B1 20050907 (DE)

Application

EP 98924046 A 19980425

Priority

- DE 9801183 W 19980425
- DE 19720867 A 19970506

Abstract (en)

[origin: DE19720867C1] The fastening system employs one or more round or elongated cup (2) which is pressed, deep drawn or stamped in the door frame (1), the cup is inserted in a hole in the components (4,40), and the head of the cup is deformed and spread to secure the component. Cups can be formed before or after the components are put in place, and heads can be compressed to form a mushroom (22) or flat (23) head. The formed cups can have a change of section (3) so that the thicker area provides location, and the thinner area gives a preferred region for deformation of the head. The system can be used to generate a Tee-section rail.

IPC 1-7

E05F 11/38; **B60R 13/02**; **B60J 5/04**

IPC 8 full level

B21D 39/03 (2006.01); **B23P 11/00** (2006.01); **B60J 1/17** (2006.01); **B60J 5/04** (2006.01); **B60R 13/02** (2006.01); **B62D 27/00** (2006.01); **E05F 11/38** (2006.01)

CPC (source: EP US)

B21D 39/032 (2013.01 - EP US); **B21J 15/046** (2013.01 - EP US); **B21K 25/00** (2013.01 - EP US)

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

DE 19720867 C1 19980903; BR 9808745 A 20000711; CN 1077197 C 20020102; CN 1255182 A 20000531; DE 59813047 D1 20051013; EP 0983417 A1 20000308; EP 0983417 B1 20050907; ES 2247696 T3 20060301; JP 2001523313 A 20011120; US 6688043 B1 20040210; WO 9850658 A1 19981112

DOCDB simple family (application)

DE 19720867 A 19970506; BR 9808745 A 19980425; CN 98804827 A 19980425; DE 59813047 T 19980425; DE 9801183 W 19980425; EP 98924046 A 19980425; ES 98924046 T 19980425; JP 54760498 A 19980425; US 42312700 A 20000224